

What is claimed is:

[Claim 1] 1. A thermal printer comprising:

a capstan roller;
a pinch roller for pressing a print medium to the capstan roller;
bushing installed around the pinch roller, wherein the outer radius of the bushing is greater than the radius of the pinch roller so that there is a gap between the capstan roller and the pinch roller; and
a pinch roller driving device for pressing the pinch roller onto the print medium or separating the pinch roller from the print medium.

[Claim 2] 2. The thermal printer of claim 1 wherein a plurality of prickers is positioned on the surface of the capstan roller for pricking the print medium.

[Claim 3] 3. The thermal printer of claim 1 wherein the bushing is sheathed on the pinch roller.

[Claim 4] 4. The thermal printer of claim 1 wherein the inner edges of the bushing are positioned outside the outer edges of the print medium.

[Claim 5] 5. The thermal printer of claim 1 wherein the pinch roller driving device comprises:

a lever connected to the pinch roller for driving the pinch roller;

a spring connected to the lever for providing an elastic force to the lever;
a cam; and
a drag link connected to the lever and the cam for transferring a travel of the cam to a travel of the lever.

[Claim 6]

6. A thermal printer comprising:

a capstan roller;
a pinch roller for pressing a print medium to the capstan roller;
bushing installed around the capstan roller, wherein the outer radius of the bushing is greater than the radius of the capstan roller so that there is a gap between the capstan roller and the pinch roller; and
a pinch roller driving device for pressing the pinch roller onto the print medium or separating the pinch roller from the print medium.

[Claim 7] 7. The thermal printer of claim 6 wherein a plurality of prickers is positioned on the surface of the capstan roller for pricking the print medium.

[Claim 8] 8. The thermal printer of claim 6 wherein the bushing is sheathed on the capstan roller.

[Claim 9] 9. The thermal printer of claim 6 wherein the inner edges of the bushing are positioned outside the outer edges of the print medium.

[Claim 10] 10.The thermal printer of claim 6 wherein the pinch roller driving device comprises:

- a lever connected to the pinch roller for driving the pinch roller;
- a spring connected to the lever for providing an elastic force to the lever;
- a cam; and
- a drag link connected to the lever and the cam for transferring a travel of the cam to a travel of the lever.